

1. **(Original)** A method for determining the location of a mobile device comprising:

receiving a location message from a communication network, wherein the location message comprises a plurality of signal tones;

modifying selected signal tones, wherein the selected signal tones have a frequency within a predetermined range of frequencies;

decoding the modified signal tones into a plurality of decoded values; and
determining a location of a user based on at least the plurality of decoded values.

2. **(Original)** The method of Claim 1, wherein modifying the volume of selected signal tones comprises setting the volume of the selected signal tones to a predetermined value.

3. **(Original)** The method of Claim 1, wherein modifying the volume of selected signal tones comprises:

increasing a volume of each selected signal tone for which the volume is below a predetermined minimum; and

decreasing a volume of each selected signal tone for which the volume is above a predetermined maximum.

4. **(Original)** The method of Claim 1, wherein determining a location comprises:

determining the location of the user based on at least the plurality of decoded values,
and

generating a location output that includes the location of the user and conforms to National Marine Electronics Association Standard 1083 ("NMEA-1083").

5. **(Original)** The method of Claim 1, wherein determining a location comprises:

determining the location of the user based on at least the plurality of values, and
generating a location output that includes the location of the user and conforms to the SiRF binary protocol.

6. **(Original)** The method of Claim 1, wherein the predetermined range of frequencies includes only frequencies between 300 and 3500 Hz.

7. **(Original)** The method of Claim 1, wherein the plurality of signal tones comprise a plurality of Dual Tone Multifrequency (DTMF) tones, the DTMF tones identifying the location of a position locating device communicated through a mobile communication device.

8. **(Original)** The method of Claim 1, wherein the location message comprises a plurality of DTMF tones and wherein receiving a location message comprises:

receiving voice communication on a voice channel established between the user and the operator, and

receiving simultaneously the location message on the voice channel.

9. **(Original)** A device for determining the location of a communication device comprising:

a network interface, operable to receive a location message comprising a plurality of signal tones;

a signal enhancement module operable to modify selected signal tones, wherein the selected signal tones have a frequency within a predetermined range of frequencies;

a tone decoder operable to decode the modified signal tones into a plurality of decoded values; and

a translator operable to determine a location of a user based on at least the decoded values.

10. **(Original)** The system of Claim 8, wherein the signal enhancement module is operable to modify selected signal tones by setting a volume of all the selected signal tones to a predetermined value.

11. **(Original)** The system of Claim 8, wherein the signal enhancement module is operable to modify selected signal tones by:

increasing a volume of each selected signal tone for which the volume is below a predetermined minimum; and

decreasing a volume of each selected signal tone for which the volume is above a predetermined maximum.

12. **(Original)** The system of Claim 8, wherein the translator is operable to determine the location by:

determining the location of the user based on at least the plurality of decoded values, and

generating a location output that includes the location of the user and that conforms to National Marine Electronics Association Standard 1083 ("NMEA-1083").

13. **(Original)** The system of Claim 8, wherein the translator is operable to determine the location by:

determining the location of the user based on at least the plurality of values, and
generating a location output that includes the location of the user and that conforms to the SiRF binary protocol.

14. **(Original)** The system of Claim 8, wherein the predetermined range of frequencies includes only frequencies between 300 and 3500 Hz.

15. **(Original)** The system of Claim 8, wherein the plurality of signal tones comprise a plurality of Dual Tone Multifrequency (DTMF) tones, the DTMF tones identifying the location of a position locating device communicated through a mobile communication device.

16. **(Original)** The system of Claim 8, wherein the location message comprises a plurality of DTMF tones and wherein the network interface is further operable to receive a location message by:

receiving voice communication on a voice channel established between the user and the operator; and

receiving simultaneously the location message on the voice channel.

17. **(Original)** A computer program stored on a computer readable medium, the computer program operable to:

receive a location message from a communication network, wherein the location message comprises a plurality of signal tones;

modify selected signal tones, wherein the selected signal tones have a frequency within a predetermined range of frequencies;

decode the modified signal tones into a plurality of decoded values; and determine a location of a user based on at least the plurality of decoded values.

18. **(Currently amended)** The computer program of Claim 17 ~~Claim 17~~, wherein the computer program is further operable to modify the volume of selected signal tones by setting the volume of the selected signal tones to a predetermined value.

19. **(Currently amended)** The computer program of Claim 17 ~~Claim 17~~, wherein the computer program is further operable to modify the volume of selected signal tones by:

increasing a volume of each selected signal tone for which the volume is below a predetermined minimum; and

decreasing a volume of each selected signal tone for which the volume is above a predetermined maximum.

20. **(Currently amended)** The computer program of Claim 17 ~~Claim 17~~, wherein the computer program is further operable to determine the location by:

determining the location of the user based on at least the plurality of decoded values, and

generating a location output that includes the location of the user and conforms to National Marine Electronics Association Standard 1083 ("NMEA-1083").

21. **(Currently amended)** The computer program of Claim 17 ~~Claim 17~~, wherein the computer program is further operable to determine the location by:

determining the location of the user based on at least the plurality of values, and
generating a location output that includes the location of the user and conforms to the SiRF binary protocol.

22. **(Currently amended)** The computer program of Claim 17 ~~Claim 17~~, wherein the predetermined range of frequencies includes only frequencies between 300 and 3500 Hz.

23. **(Currently amended)** The computer program of Claim 17 ~~Claim 17~~, wherein the plurality of signal tones comprise a plurality of Dual Tone Multifrequency (DTMF) tones, the DTMF tones identifying the location of a position locating device communicated through a mobile communication device.

24. **(Currently amended)** The computer program of Claim 17 ~~Claim 17~~, wherein the location message comprises a plurality of DTMF tones and wherein the computer program is further operable to receive the location message by:

receiving voice communication on a voice channel established between the user and the operator, and

receiving simultaneously the location message on the voice channel.